

S2-2 Green growth and LCS

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Introduction

This paper focuses on:

- a) the contribution that the transition to a low carbon society (LCS) can make to economic growth and competitiveness drawing on the work of the UK's Commission on Environmental Markets and Economic Performance (CEMEP);
- b) the application of these ideas under the new legislative framework for UK climate change policy; and
- c) the impact that the banking crisis and its aftermath may have on the low carbon transition.

Main findings

Fostering green growth

The economic opportunities associated with green growth are very large. Traditional environmental markets were worth around \$550 billion in 2004 while the market for low carbon supply technologies could be worth \$0.5-3.0 trillion by 2050. The low carbon society will involve even larger investments in buildings and transport whose carbon component will be diffuse and probably unquantifiable. Government must take the lead in promoting green through a mixture of environmental policies (carbon pricing, regulation), "market pull" innovation policies (creation of lead markets) and "technology push" innovation policies (RD&D, skills development). The key is that policy must: a) be on an appropriate timescale (not too short or too long); b) give clear and unambiguous signals to the market; and c) be credible (and hence legally enforceable). Government needs to interact with and encourage business, investors and consumers without whom green growth will not occur. Consensus-building and dialogue will reduce risk and add to credibility. Consensus-building need not mean unambitious policies.

The UK legislative and policy framework

The 2008 UK Climate Change Act builds on this thinking. It includes a legally binding target for an 80% reduction in greenhouse gas emissions between

1990 and 2050. It also establishes a system of mid-term carbon budgets covering three consecutive five periods. The initial budgets cover the periods 2008-12, 2013-17 and 2018-22. The budgets are proposed by an independent Committee on Climate Change (CCC) which also has the task of monitoring progress towards meeting the budgets. The UK Government accepted, and brought into legislation, a set of budgets which will result in a 34% reduction in GHG emissions between 1990 and 2020. The CCC recommended a set of budgets consistent with a 42% reduction in GHG emissions should a deal be struck at COP15 in Copenhagen. These reductions are judged to cost less than 1% of GDP by 2020 through switching to low carbon options in power generation, reducing transport emissions through more efficient vehicles, investing in home energy efficiency, developing renewable heat options and promoting some behaviour change.

The UK Low Carbon Transition Plan and Low Carbon Industrial Strategy

The UK Government has developed a *Low Carbon Transition Plan* to give effect to these recommendations. Under this, the UK carbon budget is distributed round different government departments which are then responsible for their delivery. Elements of the plan include getting 40% of electricity from low carbon sources (renewables, nuclear and carbon capture and storage) by 2020, promoting home energy efficiency through innovative "pay-as-you-save" schemes, investing £200 million in offshore technologies (wind, wave and tidal), and transforming transport by cutting emissions from new cars by 40% and rolling out large demonstrations of electric vehicles. In addition, the government will develop and maintain long-term roadmaps for reaching an 80% target by 2050.

A parallel *Low Carbon Industrial Strategy* seeks to gain economic advantage from the low carbon transition. The overall goals are: to capture the benefits of resource efficiency; transform infrastructure; equip the workforce with low carbon skills and drive demand for low carbon products. This will be achieved through:

- Increased support for the early stages of innovation,
- Closing the financing gap for growing low carbon companies,
- Business advice for low carbon innovators,
- Supporting low carbon innovation through procurement policy,
- Strengthening the innovation infrastructure,
- Foreign markets and investment as a driver of low carbon innovation and growth,
- A coordinated approach to government support for low carbon innovation.

Impacts of the banking crisis and recession

The final part of the paper considers the impact of the banking crisis and the subsequent recession on the low carbon transition. The main impacts are on the level of “effort” required to attain given goals and targets. This will make compliance with carbon budgets easier, but risks damaging longer-term efforts to reduce carbon emissions. The recession is also depressing current and expected carbon prices, thus reducing the incentive to invest in low carbon technologies. At the same time, the appetite for risk on the part of investors is leading to a contraction of the funding available to promote

the low carbon transition. This is being felt by the renewable sector in particular. It appears that project finance for independent developers is being hit more severely than corporate finance associated with major utilities. A potential upside of the recession is that the fiscal stimulus provides an opportunity to finance low carbon measures in areas such as energy efficiency.

Conclusions

There are now established ways of fostering green growth through co-ordinated environmental and innovation policies that are clear, unambiguous and credible to business and the markets. These need not be unambitious. The UK’s Climate Change Act 2008 sets out a novel institutional means for moving towards a Low Carbon Society through short-mid term carbon budgets and a new independent Committee on Climate Change. The Government’s *Low Carbon Transition Plan* and *Low Carbon Industrial Strategy* are aimed at meeting the ambitious carbon budgets while securing the economic opportunities associated with the low carbon transition. It is important not to lose momentum simply because the recession will make carbon targets easier to achieve. The current fiscal stimulus provides an opportunity to invest in, for example, energy efficiency measures.